Table of Contents

Alaskan Cruise Ship Exercise 99
(AK Cruisex 99)

FORWARD

Prevention and Readiness are the best deterrents for mitigating the effects of major marine disasters. For this reason the Coast Guard, in cooperation with the cruise ship industry, the State of Alaska, and local communities, has sponsored cruise ship exercises in Southeast Alaska over the past several years. The first day of Alaskan Cruisex 99 featured a seminar format, which was designed to share information about the hazards associated with operating passenger ships in Southeast Alaska. Prior to the discussions, a Command Center was set up in the Ted Ferry Civic Center to display the Incident Command System (ICS) layout that would be used by the response organizations. In addition, a communications demonstration was conducted using a satellite relay from a remote fjord south of Ketchikan. On the second day, four tabletop exercises were conducted using scenarios for both large and small capacity passenger vessels. Over 90 representatives from 43 agencies/organizations participated in the seminar. The overall goal of the seminar and exercises was to create an understanding of the capabilities, perceived roles, and concerns of the response community at large.

This report is a comprehensive account of the discussions that occurred. Hopefully the contents will provide readers with a thorough understanding of the response organizations and issues involved when responding to cruise ship contingencies in Alaska. The individual sections were developed from a detailed stenographer's report, which was provided by Zenge's Secretarial Services of Ketchikan.

Please note that the contents of this report should not be considered as policy or sited as an authority for defining the response requirements of the participating organizations.

Questions, additions, and/or corrections regarding the content of this report are encouraged. Please contact CGD17 (mor) in Juneau, AK at (907) 463-2211/2210.

Scenario 2 – Small Cruise Ship Grounding

M/V Rock Hound Aground in Behm Canal

Date: 14 June
Time: 0745
Location: Behm Canal just south of Rudyerd Bay, approximately 50 miles from Ketchikan via water.
Scenario: At 0745 today (14 June), the M/V ROCK HOUND struck New Eddystone Rock in Behm Canal just south of Rudyerd Bay and ran hard aground. The vessel is in no immediate danger and is resting comfortably with a 5-degree starboard list. #1 and #3 fuel tanks have been ruptured and are discharging at a high rate. The total combined capacity of #1 and #3 fuel tanks is approximately 19,000 gallons. The tanks are estimated to be about 80% full, making the total potential spill at 15,200 gallons of diesel.

Weather: It is 54° F, with partly cloudy skies. Wind is variable and light. Seas are calm, sea temperature is 52° F. Tide is 30 minutes after slack flood. The next high tide is in 10 hours and it will be 2 feet higher than the current high.

As the tide ebbs, the vessel is settling down onto the rocks. The master reports he can see the rocks below the water on the starboard side, and expects the vessel to heel farther to starboard but not far enough to become unstable.

There are 175 passengers on board and a crew of 30. There were no injuries during the grounding and the crew has done well maintaining calm since. All passengers are putting on their life jackets and mustering at their abandon ship stations.

Other Vessels in the area: There are two pleasure craft sightseeing in Rudyerd Bay and one 65 foot fishing vessel transiting southbound 10 miles to the north. Farther away, there are 4 fishing vessels off of Mary Island.

Coast Guard Assets Available: USCGC Planetree is in maintenance / repair status and will require approximately six hours from notification to get underway. USCGC Naushon is on patrol at the A/B line, and will not be on scene for 5-6 hours. USCG Air Station Sitka will launch one HH-60 about 20 minutes after notification, but will take roughly 1.5 hours to arrive on scene. A Coast Guard 41-foot boat is conducting underway training and will be on scene in 2 hours.

Questions

What are your notification procedures?
Where will shoreside support efforts be coordinated?
What arrangements can be made to remove the passengers?
What are your responsibilities for the passengers once they are removed?
What safety concerns do you have during the evacuation?
What concerns do you have for the health of the passengers given the pool of diesel surrounding the vessel?
Given just one or two Coast Guard assets with minimal passenger capacity (i.e. the 41 footer and a helo) which passengers get transported off first and where do you take them?
If this were to occur on a rising tide with an estimated 2 hours until the vessel is re-floated and possibly begins to sink, how does this change your response?
Do you bring people directly to the beach? Why or why not?
Do you put them in the life rafts and let them float around until help arrives? Why or why not?
How do you care for the passengers in all the situations above to ensure their safety?

Loss of power in South Indian Pass

Date: 14 June

Time: 1000

Location: South Indian Pass is located about 2 miles north of Elfin Cove near Cross Sound, approximately 100 miles from Juneau via water. This is an area well known for currents reaching as high as 10 knots.

Scenario: Vessel loses power while transiting South Indian Pass and a strong 6 knot ebb quickly pushes the vessel aground 50 yards from the beach. There are only a few minor injuries, which are quickly taken care of. The tide is falling and the ship is stable with a 5-degree list. Low tide will occur in 3 hours, and the next high tide will be in 9 hours. There is no threat of the vessel sinking or floating away. The weather is calm, temperature is 50° F and there is a light drizzle.

Other Vessels in the area: There is a 700-ft cruise ship near Hoonah, approximately 30 miles away. They are not able to enter South Indian Pass, but have litering vessels that may be able to operate in the pass at slack current. There are 4 fishing vessels trolling off of George Island. The rest of the fishing fleet is longlining in the Fairweather Grounds or 10 miles southwest of Yakobi Island (35 miles from South Indian Pass).

Coast Guard Assets Available: Coast Guard Cutter Woodrush is completing work on Poundstone Rock Buoy in Lynn Canal and has an estimated arrival of 6 hours. There is one helo currently on a fisheries overflight and will be on scene in 45 minutes.

Questions

What are your notification procedures?
Where will shoreside support efforts be coordinated?
What other assets are available to assist with passenger offload and ship repair? (This includes resources available on the vessel itself.)
When the helo arrives on scene, how will it be utilized? Who will depart the vessel first?
How will the other vessels be utilized as they arrive on scene?
If evacuating to the beach is done, how will they care for the passengers and ensure their safety?
How would things differ if the tide was rising and ship's stability was not known?
How would things differ if this occurred at night or just before dark?
Coast Guard: For this event what would be the make-up of your away team and when / how will they get on scene?

Debrief by Chief Petty Officer Will Johnson

I'm in charge of Coast Guard station Ketchikan. Mr. Kevin Hill will assist me in the debrief. We had a couple of scenarios.

The first scenario was a motor vessel that ran aground on New Eddystone Rock in Behm Canal, about 50 miles southeast of Ketchikan. No immediate danger was reported. The ship was resting comfortably with a 5-degree starboard list. Number 1 and 3 fuel tanks were ruptured and they are discharging fuel at a high rate. The total capacity of fuel that's being spilled is 19,000 gallons. The tanks are estimated at 80 percent full. Weather: 54 degrees, partly cloudy skies, winds variable and light, seas calm, sea temp's 52. We're just past high tide and they're not expecting problems with stability as the tide goes out. The master reports he can see rocks below the water on the starboard side. He expects the vessel to heel further to starboard but not enough to become unstable.

There are 175 passengers on board and a crew of 30. There were no injuries during the grounding and everyone stayed calm. Everyone has life jackets and mustered at their abandon ship stations. There are other vessels in the area that are available to assist and we also have Coast Guard assets to assist.

Our three main concerns: 1) Passenger evacuation. Do they need to be evacuated? 2) Fuel spill response 3) Salvage. We had to decide how much involvement we needed for a response like this.

Passenger evacuation will be the master's call. He will notify the local representative here in Ketchikan for that particular passenger vessel. The other concerns on that was again the stability. Communications is a problem up here. VHF-FM communications is weak in the area of the incident. We considered cell phones but unless you have satellite communications we may have to establish a relay.

Dealing with the fuel spilling, we looked at the health hazards of the passengers and crew. Depending on whether the tide is going to carry the fuel away or what the wind is doing will determine whether the fumes from the fuel will effect the passengers.

Our point of contact for the Coast Guard is Lt. Pat Clark from the Marine Safety Detachment, Ketchikan. Being in charge of the Coast Guard station, I will contact him to get the information. At the same time, we would put out a radio broadcast, what's called a MARB, Marine Assistance Radio Broadcast, for any vessels in the immediate area to respond, let us know who's responding, how long it will take to get there. Hopefully, within a couple of hours I can have a boat on scene and we may be able to have other resources there prior and obviously, we'll continue to have more assistance after that.

Please feel free to ask questions as I go through this. The Coast Guard's number one concern is to get on scene and find out what to do with passengers and crew.

Mr. Hill: From the company's point of view, we would approach it from the standpoint of it's the master's call to evacuate, but we would prepare accordingly, assuming that he would make the call to evacuate and we'd be ready. With this number of passengers, it's not too hard to acquire resources such as sightseeing boats that can respond very quickly. So, within a couple of hours, we should be able to have resources on the site to evacuate.

Chief Johnson: I'll mention the resources available. The Coast Guard has a 110-foot patrol boat available here in Ketchikan and we have our boats at CG Station Ketchikan. We have 3 helicopters from CG Air Station Sitka. They would take about 1.5 hours to arrive on scene. For the cruise ship agency, a sister ship may be able to respond. The medical folks, ADEC will be contacted, and there is the Ketchikan Volunteer Rescue Squad. There's a wonderful group of people here that have helicopters and planes and boats that can also provide excellent assistance.

In our discussion we talked about the Incident Command System (ICS) and wondered if we really needed to have a command post set up for a case of this somewhat minor magnitude. It was decided upon by the whole group that phone conversations from agency to agency would be the quickest way to deal with this kind of situation. If there were an on-scene command post set up that would be something that the CG MSD would take care of. There is a forest service cabin located in the vicinity where they can set up and take care of the additional response for evacuation as well as the pollution and finally salvage.

Going back passenger evacuation, we brought it up again about some of the safety issues and, like the large cruise ships, you still have some medical needs that those folks may have. What are the ages of the passengers? Some can be over 90 years old and handicapped in a wheelchair. We have to consider how to handle those folks and what kind of resources we have to do that.

In this scenario, we're lucky. We've got calm winds, calm seas. But, what do we do if it's real rough and that vessel's pounding on the rocks? Then how do we deal with the situation?

Mr. Hill: A big difference between the small passenger ships and the bigger ships is that you don't have the lifeboats that are covered and motorized and provide pretty good protection for the passengers. You would have to evacuate them into either open skiffs or the inflatable life rafts, which are your last resort. So your small ship is still your best shelter. If you're going to evacuate them, we would want to get some larger vessels on site and then just transfer them back and forth. We wouldn't use the life rafts except in dire emergency, because these people are fragile and they're older, and that process alone would put them at risk.

Chief Johnson: The last item we listed was the Zodiacs. This particular vessel we were talking about carries eight motorized Zodiacs.

Mr. Hill: They vary quite a bit. They all have inflatable life rafts, however.

Chief Johnson: Back to the fuel spill. Within two hours, how much fuel are you going to have still around the vessel? If it's not coming out at a high rate of flow, one of the things that we talked about near the end of this and actually in both scenarios that were similar, was we should at least do something. The Coast Guard boat can carry a small boom that can deploy around the vessel. We have a second boat that can carry more. Lt. Clark from the Marine Safety Office can contract other folks to take out larger amounts of boom. What we'll actually contain once we're there is limited, but at least we want to put an effort there to show that we do care about the

environment, and we'll get what we can get. But, the majority of the diesel fuel does dissipate into the air and you can get roughly 20 to 30 percent remainder after X number of hours. It evaporates, so it'll obviously be spread on the up tide.

The third point was the salvage. The Marine Safety Detachment will set up contracting to take care of salvaging the vessel. That completes the discussion for scenario 1.

Scenario 2 was in Indian Pass near Cross Sound, southwest of Glacier Bay area. We used the same size vessel that went aground but did not damage the hull. We talked about setting up a command post in this area, which is more desolate. The nearest community, Elfin Cove, maybe has 20 to 30 residents and no hotel services. Somebody said they had two telephones. We've got to rely a little bit more on having the resources available. We talked about setting a command post up in Bartlett Cove and part of the business with this particular vessel is they have different types of response teams set up, depending on the severity of the problem. So, that's why we have written the response team deployed. The first thing is choosing which team goes and then you notify them and you deploy them to handle the situation.

Bartlett Cove is in the entrance to Glacier Bay National Park. It's a pretty good place for a command post, but dealing with passengers, we didn't want to take them there. That's not an adequate staging area for 175 passengers. We decided Juneau would be the nearest place to actually take these folks.

Mr. Hill: The assumption here is that we'd be able to use a high speed sightseeing vessel such as the one stationed in Glacier Bay or perhaps some others, ferry boats, catamarans, etc. These are vessels may carry 250 people, but others are usually around 149, so it might take two, but still, it's the fastest way to get people to safety. Juneau was selected as the most likely place to take people.

Chief Johnson: We also talked about using fishing vessels in the area, however, they may not be the best resource. Another concern is the 8 to 10 knot currents all through the area. The response time really varies. We looked at who would respond and who was the closest. The tugs and barge companies may be the closest to help and there are other cruise vessels.

Mr. Hill: The scenario included that a 700-foot cruise vessel was 30 miles away and that we could use their lighters to transfer people. But we really felt, in this situation, with the vessel hard on the beach, no hull breached, and no immediate threat to the passengers, it's probably best to leave them there until we can get the boat off the beach. It might be the safest. A big concern was the loss of power when the ship goes high and dry.

Chief Johnson: Our concerns were: loss of power on the vessel, minor injuries among the passengers, communications (not as problematic as in the first scenario), and stability.

Mr. Hill: This was the scenario where the incoming tide drove the vessel on the beach and then the tide was expected to go out, so you could get a situation where the vessel would be swept off the beach, possibly in a loss of power situation. So a tug and barge would have to get there to secure the vessel before the tide turned. There's plenty of tug traffic in that area but all of our companies operating these small cruise ships have a response structure and an emergency plan that seems very similar to what was described in the large cruise ship scenario. Things are on smaller scale, but the structure is basically the same. There is a notification process, crisis team

organization, checklists and procedures to follow to ensure that all the proper bases are being covered, you set up a corporate statement with public relations people, and establish communications with all the agencies involved. Basically the same as the big cruise ship with a smaller scale and fewer people.

But generally, we have looked at these scenarios as probably being resolved too quickly to reasonably set up a command post on site. Everything would be pretty much handled over the existing communication systems we have in our corporations and between our ships and our shore staffs in various parts of Southeast Alaska.